

Course Description

A study of the origin, constitution, structure, and history of the earth, including the forces and events that have affected and continue to affect its development and the history of living things as recorded in sedimentary environments.

Course Objectives

Students will:

1. Understand the basic geologic concepts and principles.
2. Understand the principles of historical geology and how these principles can be used to understand the history of the earth.
3. Understand the geologic and biologic history of the earth.

Procedures to Evaluate these Objectives

1. In-class problems after concept presentation
2. In-class exams
3. Cumulative final exam

Use of Results of Evaluation to Improve the Course

1. Student responses from in-class problems will be used to provide immediate feedback to students on concept misunderstanding.
2. In-class exams will be graded and returned with written evaluations to provide improved understanding of student difficulties in understanding.
3. The cumulative final exam will be graded and examined to determine areas of teaching which could use improvement.
4. All evaluation methods will be constantly monitored to determine if there is a more effective method of presenting the material.

Detailed Topical Outline

1. Dynamic Earth, Minerals & Rocks, Geologic Time
2. Rocks, Fossils, Time, Sedimentary, Evolution
3. Evolution, Plate Tectonics, Universe, Planets, Solar System
4. Precambrian: Archaean, Proterozoic
5. Early Paleozoic
6. Late Paleozoic
7. Paleozoic Life: Invertebrates, Vertebrates, Plants
8. Mesozoic era: Geology, Life
9. Cenozoic Geology: Tertiary, Quaternary
10. Cenozoic Life, Humans